

# TM2500™ GEN8 Mobile Gas Turbine

TM2500+ is a trademark of the General Electric Company



## Key Features and Benefits

High power density – up to 35MW

Small footprint:  
24m x 6.5m (78ft x 21ft)

Flexible to operate on either  
natural gas or liquid distillate fuels

Dual frequency – 50/60Hz  
quick conversion

Low emissions:  
25ppm (gas) / 42ppm (liquid)  
using demineralized water injection

Quick to dispatch

| Technical Data*   | 60Hz   |        | 50Hz    |        |
|---|--------|--------|---------|--------|
|   | None   | Yes    | None    | Yes    |
| <b>Water injection</b><br>(NOx= 25 ppmvd@15% O <sub>2</sub> ) | None   | Yes    | None    | Yes    |
| <b>Output (MW)</b>  | 33.387 | 35.020 | 30.860  | 30.860 |
| <b>Heat rate (Btu/kWh)</b>                                    | 8,859  | 9,301  | 9,312   | 9,783  |
| <b>Heat rate (kJ/kWh)</b>                                     | 9,347  | 9,813  | 9,825   | 10,322 |
| <b>Efficiency (%)</b>   | 38.52  | 36.69  | 36.64   | 34.88  |
| <b>Pressure ratio</b>   | 22.9   | 24.3   | 22.1    | 22.3   |
| <b>Power turbine speed (RPM)</b>                              | 3,600  | 3,600  | 3,000   | 3,000  |
| <b>Exhaust flow (lb/sec)</b>                                  | 200.9  | 209    | 200.4   | 204.3  |
| <b>Exhaust flow (kg/sec)</b>                                  | 91.1   | 94.8   | 90.9    | 92.7   |
| <b>Exhaust temp (F)</b>                                       | 997.4  | 950.0  | 1,002.1 | 940.4  |
| <b>Exhaust temp (C)</b>                                       | 536.3  | 510.0  | 539.0   | 504.7  |

\* ISO Conditions  
\* 60 Hz based on a Brush air-cooled generator w/brushless excitation @ 0.90 PF, 59°F cooling air, 13.8 kV (50 Hz @ 11.5 kV), Ambient air: 59°F, 60% RH, Sea level

APR ENERGY'S MOBILE TURBINE FLEET FEATURES THE GE TM2500™ GEN8, the latest generation of one of the world's most experienced, reliable gas turbine solutions for fast-track applications. The aeroderivative turbine is capable of producing up to 35 megawatts of power and is quick to dispatch, achieving full power in less than 10 minutes.

The high power density and reliability of these units allows APR Energy to deliver scalable solutions of 400MW or more that can integrate into existing infrastructure and operate on a semi-permanent basis.

Developed specifically for delivering fast-track and mobile power, the TM2500 is packaged on a three-trailer system with a top-mounted air inlet filter and exhaust assemblies. It offers a space-conscious design with a 24m x 6.5m footprint, and can be shipped by land, air, or sea to anywhere in the world for quick installation.

A key advantage of turbines over reciprocating technology is the fuel flexibility they bring. The TM2500 has the ability to operate on, and switch seamlessly between, natural gas, LPG and diesel. It is also dual frequency, with the ability to easily convert from 50 to 60Hz.

Mobile turbines produce significantly less emissions than reciprocating engine solutions, making them a good fit for environmentally conscious customers and developed markets with stringent regulatory controls. The TM2500 offers the option of water injection for NOx suppression down to 25ppm.